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APPARATUS, SYSTEM, AND METHOD FOR MANAGING
QUALITY-OF-SERVICE-ASSURED E-BUSINESS SERVICE SYSTEMS

ABSTRACT

One or more SLA-specified service-level monitors and/or one or more provider-owned
5 service-level management monitors are used by the invention to monitor one or more quality
measures of one or more QoS-assured service systems and to generate one or more service-level
monitoring events when the monitored system does not conform to the respective quality
measures. The invention includes a cross-SLA event manager that receives the monitoring events
and determines which one or more SLA contracts are affected by the events. Then one or more
10 SLA management objects (SMOs) track the SLA-specific events generated by the event manager
according to each of the respective SLA contracts. The SMOs also determine how to
allocate/deallocate/configure SLA management resources and/or to determine the effect of these
changes on the service system operation to assure the contracted quality of service. A cross-SLA
resource manager handles the SMOs' resource allocation requests and optimizes the allocation of
15 available resources per the service provider's SLA management objectives. Finally, a SMO
manager manages the execution of SMOs and facilitates the integration and management of
service system testing-time and production-time activities.